

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Greif Brothers Corporation  
Attn: Dennis Mullin  
4300 West 130th Street  
Alsip, Illinois 60803-2093

Application No.: 01070049

I.D. No.: 031003ABA

Applicant's Designation: DRUM LINES

Date Received: July 19, 2001

Subject: New Drum Lines

Date Issued: December 6, 2001

Location: 4300 West 130th Street, Alsip

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of six spray booths with three ovens and a silk screen operation as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Unit Specific Conditions

1.1 Coating Lines

Control: Filters

1.1.1 Description

The Permittee is a manufacturer of steel drums. After preliminary forming of drums from steel coils, coating operations are conducted with paint spray booths and curing ovens.

The Permittee is installing three coating lines with associated curing ovens to coat metal drums. A silk screen operation will also be installed to label the coated drums.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Light Gauge Drum Coating Line (ASB1)	Light Gauge Interior Drum Lining Coating Line (Points 7400 & 7401) and Curing Oven (7402)	Filter
	Light Gauge Exterior Drum Exterior Coating Line (Points 7500 & 7501) and Curing Oven (7502)	Filter
	Light Gauge Parts Interior Coating Line (Points 7600 & 7601) and Curing Oven (7602)	Filter

1.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected coating lines" for the purpose of these unit-specific conditions are the coating lines identified in Conditions 1.1.1 and 1.1.2.
- b. Each affected coating line is subject to 35 IAC 212.321(a), which provides that:
  - i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
  - ii. The emissions of particulate matter into the atmosphere in any one hour period from each of the affected coating lines shall not exceed the allowable emission rates specified in the following equation:

$$E = A(P)^B$$

Where:

P = Process weight rate;

E = Allowable emission rate; and,

- A. For process weight rates up to 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- B. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. The exterior coating operations on the affected coating lines are subject to 35 IAC 218.204(j)(2)(B) for Miscellaneous Metal Parts and Products Coatings for extreme performance coatings (baked) which provides that:

- i. No owner or operator of an affected coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to Miscellaneous Metal Parts and Products for extreme performance. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>kg/liter</u>	<u>lb/gallon</u>
0.40	3.3

- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

d. The interior coating operations on the affected coating lines are subject to 35 IAC 218.204(j)(3) for Miscellaneous Metal Parts and Products Coatings for steel pail and drum interior coating which provides that:

- i. No owner or operator of an affected coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to Miscellaneous Metal Parts and Products for steel pail and drum interior. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>kg/liter</u>	<u>lb/gallon</u>
0.52	4.3

- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

1.1.4 Non-Applicability of Regulations of Concern

- a. Each affected coating line is not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes coating lines subject to 35 IAC 218.204 (Condition 1.1.3(c) and (d) from this requirement.
- b. This permit is issued based on the affected coating lines not being subject to control requirements pursuant to Section 112(g) of the Clean Air Act because emissions of hazardous air pollutants (HAP) will not exceed applicable thresholds of 10 tons per year for any one HAP or 25 tons per year for combined HAPs.

1.1.5 Operational and Production Limits and Work Practices

- a. i. Usage of coatings and cleanup solvents on affected coating lines shall not exceed the following limits:

	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>
Interior Coatings	1,100	8,500
Exterior Coatings	1,800	14,000
Cleanup Solvents	80	800
- ii. A. Compliance with these limits shall be determined excluding water contained in the mate.  
  
B. Compliance with the above annual limits and other annual limits in this permit shall be determined from a running total of 12 months of data.
- b. The curing ovens shall only be operated with natural gas as the fuel.
- c. i. The Permittee shall operate, maintain, and replace the filters in a manner consistent with good air pollution control practice.  
  
ii. An adequate inventory of spare filters shall be maintained.

1.1.6 Emission Limitations

Emissions of VOM from coatings and cleanup solvents used on affected coating lines shall not exceed the following limits:

Lb/Month

Tons/Year

6,225

24.4

1.1.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on affected coating lines shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a).

- a. The VOM content of representative coatings "as applied" on the affected coating line shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a);
- b. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 1.1.9(a) directly reflect the application of such material and separately account for any additions of solvent. [35 IAC 218.105(a)]

1.1.8 Monitoring Requirements

The Permittee shall visually inspect the filters on a regular basis in order to confirm proper placement of the filters and absence of leaks and ensure timely replacement.

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected coating lines, which records shall be retained for five years, as specified by Condition 9.6.3 of the source's CAAPP permit, 95100038,

- a. For each coating line:
  - i. The name and identification number of each coating as applied on each affected coating line;
  - ii. The usage of each coating, in units of gallons/month and gallons/year;
  - iii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on each affected coating line.

- iv. VOM emissions from the use of coatings in tons/month and tons/year.
- b.
  - i. The name and identification number of each cleanup solvent used;
  - ii. The amount of each cleanup solvent used, in units of gallons/month and gallons/year;
  - iii. The weight of VOM per volume of each cleanup solvent (minus water and any compounds which are specifically exempted from the definition of VOM) used.
  - iv. VOM emissions from the use of cleanup solvents in tons/month and tons/year.
- c. Records of the testing of VOM and HAP content (in wt. %) of each coating and cleaning solvent as tested pursuant to Condition 1.1.7, which include the following:
  - i. Identification of material tested,
  - ii. Results of analysis;
  - iii. Documentation of analysis methodology; and
  - iv. Person performing analysis.
- d. Amount (gal/mo, gal/yr) and VOM content (lb VOM/gal) of paint and solvent waste collected and shipped for off-site disposal.
- e. Total VOM emissions associated with affected coating lines (tons/month and tons/year).
- f. Results of filter inspections and dates of replacements.

#### 1.1.10 Reporting Requirements

- a. Pursuant to 35 IAC 218.211(c) (3) (A), the Permittee shall notify the Illinois EPA of any record showing deviations of an affected coating line with Conditions 1.1.3(d) and (e) within 30 days of such an occurrence.
- b. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of other deviations of an affected coating line with the permit requirements as follows. Reports shall describe the probable cause

of such deviations, and any corrective actions or preventive measures taken:

#### 1.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating lines without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of coatings, thinners, or cleaning solvents at this source with various VOM contents provided that the materials are tested in accordance with the conditions of this section, and the affected coating lines remain in compliance.

#### 1.1.12 Compliance Procedures

- a. Compliance with the particulate matter standards in Condition 1.1.3(b) are assumed to be achieved by the proper operation and maintenance of the filters as required by Condition 1.1.5(c) and the work-practices inherent in operation of affected coating lines.
- b. Compliance of coatings with the VOM emission limitations shall be based on the recordkeeping requirements in Condition 1.1.9, testing as required in Condition 1.1.7, and by use of the formulae listed below:

$$\text{Coating VOM Emissions} = \sum U_n \times V_n / 2000,$$

Where:

$U_n$  = Usage of coating n (gal/mo, gal/yr)

$V_n$  = Weight of VOM per volume of coating n (lb/gal)

$$\text{Cleanup VOM Emissions} = \sum U_n \times V_n / 2000,$$

Where:

$U_n$  = Usage of cleanup solvent n (gal/mo, gal/yr)

$V_n$  = Weight of VOM per volume of cleanup solvent n (lb/gal)

$$\text{Waste VOM} = \sum U_n \times V_n / 2000,$$

Where:

$U_n$  = Amount of waste n (gal/mo, gal/yr)

$V_n$  = Weight of VOM per volume of waste n (lb/gal)

Total VOM Emissions = Coating VOM Emissions +  
Cleanup VOM Emissions -  
Waste VOM

2. This permit is issued based on negligible emissions of volatile organic material from the silk screening process. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and  $0.44 + 24.4 = 24.84$  ton/year.

Please note that the Permittee is authorized to operate the emission units covered under this permit until the CAAPP permit is to be renewed.

If you have any questions on this, please call Bob Smet at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RPS:jar

cc: Region 1